



Faculty of Computer Science and Information Technology

A Web-based Homework Monitoring System for Sekolah Rendah Bangsar

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**A WEB-BASED HOMEWORK MONITORING SYSTEM FOR SEKOLAH
RENDAH BANGSAR**

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Abstract

This project aims to describe the proposed system of A Web-based Homework Monitoring System. Development of the proposed system is to solve the problem that occurs at home by parents who have kids at school. Some parents did not aware that their children have homework that needs to finish by a certain time given by the teachers. Moreover, some teacher did not have any platform to use to communicate formally to their student's parents. In addition, the use of paper to spreading the news is one of the big challenges and issues faces by the school. This is because sometimes school might be running out of budget to buy the paper to use. As a result, some important news might be miss. With the new proposed system, the problem can be solved and a perfect way for the teacher and parents to manage their student's homework.

Abstrak

Projek ini bertujuan untuk menerangkan mengenai sistem berasaskan web pengawasan kerja-rumah. Pembangunan sistem ini adalah untuk menyelesaikan masalah yang terdapat dirumah yang dihadapi oleh ibu bapa yang mempunyai anak-anak di sekolah. Ada sesetengah ibu bapa tidak mengetahui anak-anak nya mempunyai kerja rumah yang perlu disiapkan didalam tempoh masa yang diberikan oleh guru-guru mereka. Lebih-lebih lagi, sesetengah guru tiada cara yang formal untuk berkomunikasi dengan ibu-bapa kepada pelajar-pelajar mereka. Sebagai tambahan, penggunaan kertas sebagai tempat untuk menyebarkan maklumat-maklumat adalah cabaran utama yang dihadapi oleh pihak sekolah. Ini kerana, pihak sekolah ada ketika tidak ada bajet untuk membeli kertas untuk menggunakannya. Masalah ini menjurus mengakibatkan sesetengah maklumat-maklumat yang peting tidak dapat disampaikan. Dengan adanya sistem ini, masalah-masalah tersebut dapat diselesaikan dan dalam masa yang sama, guru-guru dan ibu bapa dapat memanfaatkan sistem ini untuk menguruskan kerja-rumah dengan lebih cekap lagi.

CHAPTER 1: INTRODUCTION

1.1 Introduction

The evolution of technology has dramatically changed society (Simuforosa, 2013). Life was difficult before the advent of modern technology, and the daily task absorbed too much of our time. Technology that has been used nowadays play an essential role in human life that offers so many immense opportunities. To prepare the students for the future, educational institutions like schools should use them both for themselves and their students. All educator including teachers can make use of information technologies in the knowledge society when reviewing and assigning homework and planning homework for students as a requirement.

Homework can be said to be an integral part of the education system, allowing students to improve and develop awareness and encouraging them to be involved in the process. Besides that, parents also play an important role such as monitoring, supporting, help the homework and ensuring that their children complete their homework. Hence, by doing the homework provided by the teachers, the student's grade can be improved by the time. An essential approach should be applied to the Sekolah Rendah Bangsar. This approach could be beneficial to the Sekolah Rendah Bangsar, where teachers can track down their homework given to the students at anywhere even at the teacher's home

This system helps teachers to increase their student's grade by monitoring their every homework given to their students. In addition, it will allow the parents of Sekolah Rendah Bangsar students to acknowledge the homework given to their kids. Other than that, the system enables Sekolah Rendah Bangsar to make an announcement or news at the system. The proposed system enables parents to monitor their kid's homework by providing a page

that contain information about the homework directly from their smartphone or laptop. Parents also can submit the homework by themselves into the system.

1.2 Problem Statement

Some parents at Sekolah Rendah Bangsar did not seem aware that their children receive homework that has a due date and must submit accordingly to the due date given. Due to lack of parenting time at home and unmanageable homework is given, parents see homework as their own children responsibility. After the teacher assigns homework to their students, the homework is either doing at home or not at all. Moreover, the students will face punishment at the school if the homework is not finished, and this is a waste of time for the students and also for the teacher.

The students also say no to their parents whenever their parents are asking if they have homework given by the teachers or not, and this is a non-argument answer. Besides that, Sekolah Rendah Bangsar could possibly facing issues with paper where physical notification and homework that give to their students consume a lot of writing. Also, the current system or platform that use for communication between teacher and parents are done mostly through WhatsApp which is not currently an excellent platform for communicating the teacher and students.

1.3 Objective

The main objective of this project is:

- To develop a system for Sekolah Rendah Bangsar teachers and parents monitoring their children homework
- To enable notification for the parents regarding the news, events and homework release and the due date for the submission
- To provide a system for parents to be able manage their children homework systematically

1.4 Methodology

The methodology used to carry out this project is a waterfall model. The waterfall model consists of a phase that is the requirement analysis phase, design phase, implementation or coding phase, testing phase, and maintenance phase. Each phase in this waterfall model must be completed before moving on to another phase (Griffin, 1984)

1) Requirement Analysis

In this phase, is to require all possible requirement in order to develop this system. The system requirement is collected through survey and questionnaires at Sekolah Rendah Bangsar. The data later will be analysed to meet the system requirement and later to be used in the next phase.

2) Design phase

Next, based on the data that have been done in the analysis phase, it will be used at this phase to provide proposed system design so that it can achieve all the system requirements and needs of the users. The design process allocates the requirements of the software system by establishing overall system architecture

3) Implementation / Coding phase

At this stage, the project needs to be developed by coding. The main programming language that uses in this project is HTML and PHP. Due to involvement in designing the user interface of the system, the main tool that using is Adobe Dreamweaver. The coding also needs to be completed step by step by using the technique of compiling, followed by testing and integrating until it meets the system architecture requirement. The user interface or front-end of the system is designed using CSS and HTML language and backend of the system is mostly be written in PHP language.

4) Testing phase

Next, once the development of the system has been completed, several users will be required to test this system. This is to determine whether all the requirements have been achieved. Also, some of the few parents from parents, students and teacher from SK Bangsar will be picked as a testers of this system to makes sure all bugs and errors already been eliminated

5) Maintenance phase

Lastly, the system will need to be fixed and updated from time to time in order to fulfil the user experience of this system. Therefore, documentation about feedback will be prepared in order to maintain the system for future enhancement and functionality.

1.5 Project Scope

The scope of this system comprises of:

- Teachers at Sekolah Kebangsaan Bangsar can add, edit, delete and update the data like homework, additional note, news or emergency announcement to the system
- Parents of students at Sekolah Kebangsaan Bangsar can view the homework, their children's grade, and read the news about the school;

- This system is going to developed using Adobe Dreamweaver with PHP and HTML as main programming language including MySQL as a management database system;
- The user of the system is teachers and parents of Sekolah Rendah Bangsar; and
- The news and announcement though that broadcast to all the system user is made from the teacher and admin and will be available to read by parents.

1.6 Significance of Project

The significance of this project is to help Sekolah Rendah Bangsar teacher increasing their student's grade by providing a better way to monitoring their homework given to their students. Besides that, this system could help teacher giving full attention to the particular student who has a bad grade in their studies. Other than that, the significance of the proposed homework monitoring system will also be able for parents tracking down their children's homework that has been given to them. Other than that, this homework monitoring system can be very helpful for parents at home if they know which homework is delivered to their children. Last but not least, this proposed system could help Sekolah Rendah Bangsar reducing the use of paper in the meantime could also reduce the cost of buying paper

1.7 Project Schedule

This project schedule is using a Gantt chart to manage time control to ensure the development of the proposed project can be completed within the timeframe given. Figure 1.1 describe the schedules along with the project development.

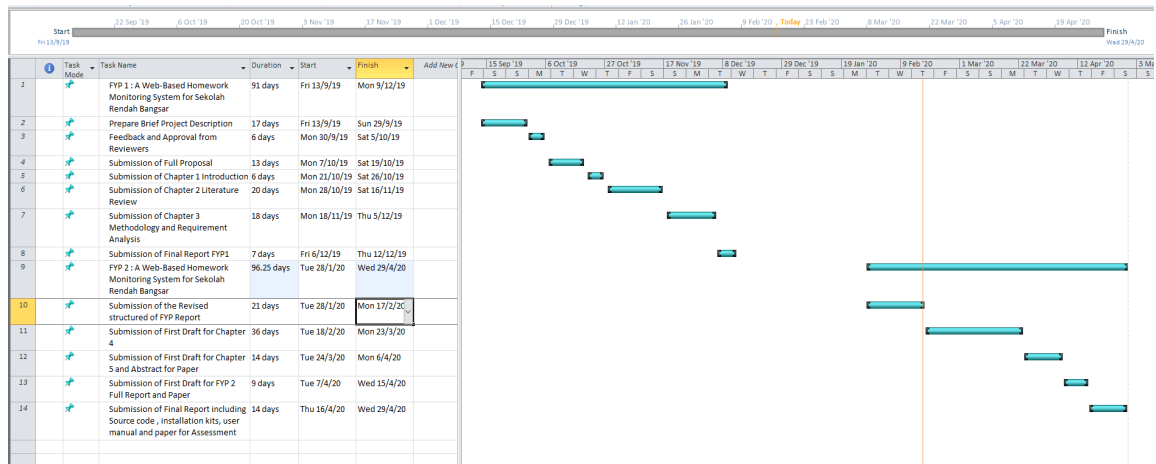


Figure 1.1 Gantt chart of the project schedule for FYP

1.8 Expected Outcome

A Web-based homework monitoring system for Sekolah Rendah Bangsar can be very helpful for the teacher who wanted to upgrade their student's grade as in this proposed system can be used to monitoring their homework give. On the other hand, instead of using paper as a platform to spread announcement or news, Sekolah Rendah Bangsar administrator office or teacher can use this system to spread the news to the parents at home

1.9 Project Outline

There are six chapters included in the Final Year Project (FYP). The summary of the chapters is explained as below:

Chapter 1 is representing the introduction of the proposed system. This chapter is inclusive of the introduction of the project, problem statement, the objective of the project, the methodology used, the scope of the project, significance of the project, project schedule and its expected outcome.

Chapter 2 is about the reviews on the existing or similar system to the proposed system. The study of this chapter is mainly done on journal, past final year project, books and conference papers. The strengths and weaknesses of the system are determined to help enhance the proposed system. Moreover, a brief description of the software and the hardware used to develop the system is also covered in this chapter.

Chapter 3 discusses the methodology applied for project development. The methodology chosen is waterfall model which adopted from (Griffin, 1984). This chapter also includes the techniques used to obtain user requirements.

Chapter 4 is focused on the full details of the system's implementation. Screenshot and interface layout will be used to help in explaining and demonstrating the system's structures and behaviours. In this chapter also provided a walk-through of the system to explain its behaviour and relate it to the design.

Chapter 5 discusses the testing done for the system and give conclusion of the entire project. There is numerous way to testing the system including getting feedback from the use. This chapter also include the suggestion and recommendations on the system's improvement on the functionality and performance

Chapter 5 discusses more on the future work of the proposed system and explain some of the limitation appear of the system

1.10 Summary

In Chapter 1, several things are introduced briefly including the brief introduction about the project which is a web-based homework monitoring system for Sekolah Rendah Bangsar. The system is used by teacher and parents of Sekolah Rendah Bangsar. Next, the problem statement also stated clearly in this chapter. The objective of the project also being listed in